

LArSoft - Support #20241

Make Qt and PyQt 4/5 official ups products

06/28/2018 12:08 PM - Corey Adams

Status:	Assigned	Start date:	06/28/2018
Priority:	High	Due date:	
Assignee:	Erica Snider	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.20 hour
Experiment:	LArIAT, MicroBooNE, SBND	Co-Assignees:	
Description			
<p>Multiple experiments use PyQt for their online event displays: microboone, lariat, pixlar, and now sbnd-vst. Additionally, microboone's offline event display uses pyqt. I have been supporting this myself since several years ago, after an initial request to include these softwares was declined.</p> <p>The situation is untenable now: too many versions of uboonecode exist that are incompatible with different builds of qt/Pyqt, sbnd, lariat, and microboone daq all use seperate versions of gcc requiring separate versions of qt/Pyqt.</p> <p>I would like to request that larsoft officially support PyQt with each distribution of python that is released. Otherwise, it is just impossible to maintain the graphics tools by myself, and I can no longer support any visualization tools for any of these experiments.</p> <p>Thanks, Corey</p>			

History

#1 - 07/02/2018 10:53 AM - Lynn Garren

- Status changed from New to Assigned

- Assignee set to Erica Snider

#2 - 07/02/2018 01:08 PM - Erica Snider

Hi Cory,

The SciSoft group does not have the tools to reliably build and test Qt or PyQt, which is why we have been reluctant to distribute even just Qt. We do, however, have access to a build of Qt that is known to work with Geant4 (and therefore is compatible with the rest of the LArSoft build) that we obtain from the DAQ group. This can in principle be made part of the LArSoft distribution. We will put the version we have up on cvmfs for testing.

Since this is at present primarily an issue related to the online event display, we would like to explore the possibility of having the DAQ group extend their support to include PyQt in addition to Qt.

My understanding is that in both cases, this is a linux-only solution.

Please contact me directly if you would like to discuss this further.

#3 - 07/02/2018 01:16 PM - Corey Adams

Hi Erica,

Thanks for the update. I would add that this may also apply to the microboone offline event display. I am not sure what their plans are, however - I contacted the AT and physics coordinators but got no reply.

Linux-only is fine for me, I don't know if the experiments want something different. As far as I know, all online event displays are running on linux machines.

What's the timescale for this, do you expect?

Thanks,
Corey

#4 - 07/02/2018 01:26 PM - Lynn Garren

qt v5_10_1a has just been installed in /cvmfs/larsoft.opensciencegrid.org/products. Depending on latency issues, it may be a while before it is available at your site.

```
source /cvmfs/larsoft.opensciencegrid.org/products/setup
```

```
ups list -aK+ qt v5_10_1a
"qt" "v5_10_1a" "Linux64bit+3.10-2.17" "e15" ""
"qt" "v5_10_1a" "Linux64bit+2.6-2.12" "e15" ""
"qt" "v5_10_1a" "Linux64bit+2.6-2.12" "c2" ""
"qt" "v5_10_1a" "Linux64bit+3.10-2.17" "c2" ""
```

#5 - 07/03/2018 11:24 AM - Erica Snider

Hi Corey,

I hope to talk to people in the DAQ group over the next few days, but I won't have a handle on the timescale beyond that until I do. I'm hoping that it will turn out to be straight-forward for them. We'll see.

Erica

#6 - 07/03/2018 11:28 AM - Tracy Usher

Is QT being considered as the engine for the LArSoft event display? If so, would getting a full release of QT available on all supported platforms facilitate getting an updated LArSoft event display off the ground? I recognize there are issues with building QT with the constraints of the existing build system... but it is also the case that QT can be built on OSX and linux so (in the ever so famous double quotes) "it can be done"...

#7 - 07/03/2018 04:42 PM - Erica Snider

I was planning to look at Qt, yes.

Erica